

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants:	Mazet, et al.	Group Art Unit:	Unknown
Application No.:	Unknown	Examiner:	Unknown
Date Filed:	April 29, 2005	Batch No.:	Unknown
Intl. Appl. No.:	PCT/EP/2003/050774	Intl. Filing Date:	October 31, 2003
Title:	COMMUNICATION UNIT AND METHOD OF CHANNEL ESTIMATION IN AN OFDM COMMUNICATION SYSTEM		

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner For Patents  
Alexandria, VA 22311

SIR:

In accordance with 37 C.F.R. §1.56 and in compliance with 37 C.F.R. §§1.97 and 1.98, the references listed on attached Form PTO/SB/08 and/or subsequently identified herein, are being submitted herewith for consideration by the United States Patent and Trademark Office.

**I. COPIES**

- a. ☒ A legible copy of (i) each U.S. and foreign patents; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed, is included herewith.
- b. ☐ Any patents, publications or other information which are listed on PTO/SB/08 which are not enclosed herewith were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. §120:

U.S. Serial Number

U.S. Filing Date

**II. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)**

- a. ☒ Except as may be indicated below in (b) of this section, all of the patents, publications or other information are in the English language (concise explanation not required).
- b. ☐ A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows:
- c. ☐ The following additional information is provided for the Examiner's consideration:

**III. ☐ CROSS REFERENCE TO RELATED APPLICATION(S)**

The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this (these) applications to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. §122.

Serial No.

Filing Date

Art Unit

**FEES**

**IV. ☒ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(b): (check one box)**

- a. ☒ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. §1.97(b)(1)). No fee or statement is required.
- b. ☐ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. §1.97(b)(2)). No fee or statement is required.
- c. ☐ before the mailing date of a first Office Action on the merits (37 C.F.R. §1.97(b)(3)). No fee or statement is required.
- d. ☐ before the mailing date of a first Office Action after the filing of a request for continued examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required.

JC14 Rec'd PCT/PTO 29 APR 2005

- V. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(c): (check one box)  
 before the mailing date of any of a Final Office Action under 37 C.F.R. §1.113, a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in the application (See 37 C.F.R. §1.97(c)).
- a. ☐ No statement; therefore, charge deposit account 502117 the fee set forth in 37 C.F.R. §1.17(p).  
 b. ☐ See the statement below. No fee is required.

- VI. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(d):  
 on or before payment of the issue fee and is accompanied by the following:
- 1) a statement under 37 C.F.R. §1.97(e) as provided below; and  
 2) charge deposit account 502117 the petition fee set forth in §1.17(p).

- VII. ☐ STATEMENT UNDER 37 C.F.R. §1.97(e) (check only one box, if applicable)

The undersigned hereby states that

- a. ☐ each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of IDS; or  
 b. ☐ no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and to knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement, or  
 c. ☐ some of the items of information contained in the IDS were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.

VIII. PAYMENT OF FEES

- ☐ A check in the amount of \_\_\_\_\_ is enclosed for the above-identified fee(s).  
☐ Please charge Deposit Account No. 502117 in the amount of \$180.00 for the above-indicated fee(s).  
☒ If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 502117  
☐ Two Copies of this paper are attached for Deposit Account charges and debits.

The above references are being cited only in the interests of candor and without any admission that they constitute statutory prior art or contain matter which anticipates the invention or which would render the same obvious, either singly or in a combination, to a person of ordinary skill in the art.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 502117.

Respectfully submitted,  
 Mazet, et al.



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- Enclosures: ☒ Information Disclosure  
                   ☒ Statement by Applicant  
                   ☒ References  
                   ☐ Foreign Search Report  
                   ☐ Other:

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**Complete if Known**

Application Number	N/A
Filing Date	April 29, 2005
First Named Inventor	MAZET, ET AL.
Group Art Unit	N/A
Examiner Name	N/A
Attorney Docket Number	CR00566P

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Sheet	1	of	2
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Examiner Signature		Date Considered	
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<sup>1</sup> Unique citation designation number. <sup>2</sup> See Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English Language Translation is attached.

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**Complete if Known**

Application Number

N/A

Filing Date

APRIL 29, 2005

**First Named Inventor**

MAZET, ET AL.

Group Art Unit

N/A

Examiner Name

	N/A
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Attorney Docket Number

CR00566P

Examiner  
Initials\*Cite  
No. 1

Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.

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PANAYIRCI, ET AL., Maximum A Posteriori Multipath Fading Channel Estimation for OFDM Systems, EUROPEAN TRANSACTIONS ON TELECOMMUNICATIONS, vol. 13, no. 5, September 2002, pages 487-494, XP001133082, MILAN, ITALY

XIANGYANG ZHUANG, ET AL., Iterative Channel Estimation and Decoding for a Turbo-Coded OFDM system via the EM Algorithm, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, 13-17 May 2002, pages 2337-2340, XP001148757, 2002, Piscataway, NJ, USA, IEEE, USA

JAFFROT, ET AL., Turbo Channel Estimation for OFDM Systems on Highly Time and Frequency Selective Channels, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING PROCEEDINGS, 5-9 June, 2000, pages 2977-2980, XP002171257, NEW YORK, US

Examiner  
Signature

Date \_\_\_\_\_

**Considered**

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation, if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English Language Translation is attached.